

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A home link setting method at a start time of activating or a time of initializing a home gateway device ~~having a home agent function for accommodating terminals including a first mobile terminal~~ a mobile terminal in a home link, the home gateway device being connected to the mobile terminal via a plurality of communication links~~link~~, the method comprising:

~~responsive to activating or initializing the home gateway device, connecting the home gateway device with the plurality of communication links, by the home gateway device;~~

transmitting, by the home gateway device, a solicitation message requesting network information used for setting a home network accommodating the mobile terminal to the a plurality of connected communication links, the plurality of the connected communication links being already connected at the start time of activating or at the time of initializing the home gateway device;

receiving, by the home gateway device, an advertisement message including the network information from at least one of the plurality of the connected communication links to which the solicitation message has been sent;

selecting, by the home gateway device, a communication link to connect as the a-home link from among the plurality of the connected communication links other than a communication link which has received the network information~~the at least one of the plurality of the connected communication links from which the advertisement message has been received;~~ and

executing, by the home gateway device, an internal setting so as to conduct ~~the a home agent function with respect to a the mobile terminal on the home link~~selected communication link.

2. (Currently Amended) The home link setting method according to claim 1,

wherein in said selecting of the ~~home-communication~~ link, a respective communication link to which the ~~first~~-mobile terminal complying with a mobile IP protocol is connected is designated as the home link.

3. (Currently Amended) The home link setting method according to claim 2, wherein the ~~first~~-mobile terminal is connected to the respective communication link connecting to a communication interface,

wherein in said execution of the internal setting, when home agent information meets conditions specified by the network information, the internal setting is executed using acquired home agent information, whereas when the home agent information does not meet the conditions, the internal setting is executed using home agent information generated based on the network information.

4. (Currently Amended) The home link setting method according to claim 3,

wherein in said execution of the internal setting, when the internal setting is executed using the home agent information which is newly generated, a notification of the newly generated home agent information is given to all ~~of the~~-mobile terminals on the home link.

5. (Currently Amended) The home link setting method according to claim 3, further comprising:

acquiring information concerning a mobile router function stored in the ~~first~~ mobile terminal,

wherein when the ~~first~~-mobile terminal performs a mobile router operation, a setting of a home agent corresponding to the mobile router is executed.

6. (Currently Amended) A home gateway device ~~having a home agent function for accommodating terminals including a first mobile terminal~~ a mobile

terminal in a home link, the home gateway device connected to the mobile terminal via a communication link, comprising:

plural communication links connected to an Internet network or a local link, the plural connected communication links being already connected at a start time of activating or at a time of initializing the home gateway device;

a network information processing unit transmitting a solicitation message requesting network information used for setting a home network accommodating the mobile terminal to the plural connected communication links and receiving an advertisement message including the network information from at least one of the plural connected communication links to which the solicitation message has been sent;

an interface setting unit selecting a communication link to connect as the home link from among the plural connected communication links other than a communication link which has received the network information to be the home link the at least one of the plural connected communication links from which the advertisement message has been received;

a home agent processing unit performing a home agent function with respect to the mobile terminals-terminal on the home-selected communication link; and

a home agent setting unit executing settings at a-the start time of activating or the time of initializing the home gateway device in said home agent processing unit so as to conduct the home agent function with respect to the mobile terminals-terminal on the home-selected communication link.

7. (Currently Amended) The home gateway device according to claim 6,

wherein said interface setting unit transmits a verification message for verifying an existence of the first-mobile terminal complying with a mobile IP, and designates a respective communication link which has received a message responding to the verification message notifying the existence of the first-mobile terminal, as the home link.

8. (Currently Amended) The home gateway device according to claim 7,

wherein said interface setting unit acquires home agent information stored in one of the ~~a plurality of~~ mobile terminals connected to the home link, and

wherein when the home agent information meets conditions specified by the network information, said home agent setting unit performs a setting of the home agent function using the acquired home agent information, whereas when the home agent information does not meet the conditions, said interface setting unit generates home agent information based on the network information and said home agent setting unit performs a setting of said home agent processing unit using the generated home agent information.

9. (Previously Presented) The home gateway device according to claim 8,

wherein when said interface setting unit newly generates the home agent information, said home agent setting unit notifies all of the terminals on the home link of the new home agent information.

10. (Currently Amended) The home gateway device according to claim 8,

wherein said interface setting unit further acquires information concerning a mobile router function stored in the ~~first~~ mobile terminal, and

wherein when the ~~first~~ mobile terminal performs a mobile router operation, said home agent setting unit executes a setting corresponding to the mobile router in said home agent processing unit.

11.-14. (Cancelled)

15. (Currently Amended) The home link setting method according to claim 4, further comprising:

acquiring information concerning a mobile router function stored in the ~~first~~ mobile terminal,

wherein when the ~~first~~ mobile terminal performs a mobile router operation, a setting of the home agent corresponding to the mobile router is executed.

16. (Currently Amended) The home gateway device according to claim 9,

wherein said interface setting unit further acquires information concerning a mobile router function stored in the first mobile terminal, and

wherein when the mobile terminal performs a mobile router operation, said home agent setting unit executes a setting corresponding to the mobile router in said home agent processing unit.

17. (Currently Amended) A home link setting method at a start time of activating or a time of initializing a home gateway device having a home agent function for accommodating terminals including a first mobile terminal a mobile terminal in a home link, the home gateway device being connected to a plurality of the mobile terminal via a communication link, comprising:

~~responsive to activating or initializing the home gateway device, connecting the home gateway device with the plurality of communication links, by the home gateway device;~~

transmitting, by the home gateway device, a solicitation message requesting network information used for setting a home network accommodating the mobile terminal to a plurality of connected communication links, the plurality of the connected communication links being already connected at the start time of activating or at the time of initializing the home gateway device;

receiving, by the home gateway device, an advertisement message including the network information for setting the home network ~~through a communication link connected to an Internet network~~from at least one of the plurality of the connected communication links to which the solicitation message has been sent;

selecting, by the home gateway device, a communication link to connect as the home link from among the plurality of the connected communication links other than the communication link which has received the network information~~the at least one of the plurality of the connected communication links from which the advertisement message has been received;~~ and

executing, by the home gateway device, a setting for conducting ~~the~~a home agent function with respect to ~~a~~the mobile terminal on the ~~home~~selected communication link,

selecting, by the home gateway device, one of: (1) a first mode of operation in which the mobile terminal on the selected ~~home~~communication link uses home agent information stored in the ~~first~~ mobile terminal for conducting the home agent function or (2) a second mode of operation in which the mobile terminal on the selected ~~home~~communication link uses other home agent information for conducting the home agent function, the other home agent information being based on the received network information,

wherein the step of executing the setting causes the mobile terminal on the selected ~~home~~communication link to conduct the home agent function in accordance with the selected first or second mode of operation.